



LOCATION MAP

GENERAL NOTES

- 1) All existing and proposed on-site stormwater improvements are private, and will be owned and maintained by Fred Weber, Inc.
  - 2) According to panel 240 of the Flood Insurance Rate Map (FIRM) for St. Charles County with an effective date of August 2, 1996, the entire site is located in Zone X, outside of the 500-year floodplain.
  - 3) A soils report will not be completed for these storm improvements. All fill placed under proposed storm sewers and proposed paved roads and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified Proctor AASHTO T-180 Compaction Test, or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed paved areas shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. All fill beneath paved areas shall be well graded crushed limestone, MSD #3 or sand. Backfill excavations for sewers as promptly as work permits, but not until completion of the inspection, testing, approval, and recording of locations of underground utilities and pipelines.
  - 4) The Contractor shall assume complete responsibility for controlling all siltation and erosion of the project area during and after construction. The Contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences. The primary method of control shall be temporary Rock Dikes installed across the open channel. Rock Dikes shall be installed at the approximate locations shown. The top of dike shall be approximately 1/3 the channel depth. The ends of the dikes shall be tied into the adjacent channel bank. Rock for the Dikes shall be adequately sized to withstand the channel flows without movement. The core of the rock dike shall be reverse graded to adequately trap sediment. Sumps shall be excavated as deep as practicable immediately upstream of the dikes.
- Controls shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner, and/or the City of O'Fallon. The Contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt in accordance with NPDES permit conditions. The Owner and/or the City of O'Fallon may at their option direct the Contractor in their methods to protect property and improvements in accordance with NPDES permit conditions. Any depositing of silts or mud in new or existing storm sewers and swales shall be removed after each rain and affected areas cleaned in accordance with NPDES permit requirements. The Contractor shall inspect and make all necessary corrections to the erosion control system, including cleaning out the area immediately upstream of the Rock Dikes, within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- Rock Dikes shall be removed as pipe installation proceeds upstream. Pipe between B and C shall be installed last, and Rock Dike #1 shall remain in place until all other upstream stormwater improvements are completed.
- 5) All new storm sewers shall be installed with Flared End Sections (FES). The Flared End Sections shall include a poured concrete cutoff wall keyed into the surrounding soil. The cutoff wall shall be a minimum of 12 inches thick, and shall extend at least 2-feet below the flowline of the pipe. The cutoff wall shall be in contact with exterior of the pipe to the pipe spring line, and extend at least 1-foot outside the pipe on each side.
  - 6) All new storm sewers shall have at least 3-feet of soil or rock cover over the top of pipe.
  - 7) All new manhole structures shall be constructed with at least a 0.2-foot flowline drop through the manhole.
  - 8) The location and depth of existing underground facilities, structures and utilities, if shown on these plans, shall be considered approximate. There may be others, the existence of which are unknown. The Contractor shall be solely responsible to notify all utility companies, field locate and verify all existing underground facilities, structures and utilities, either shown or not shown on these plans, prior to the beginning of excavation or construction. Any discrepancy between the size, quantity, depth or location of underground improvements shown on these plans and those located in the field shall be immediately brought to the attention of the Engineer.
  - 9) Field-verify all dimensions before construction. Do not scale drawings, follow dimensions.
  - 10) Property lines and fence lines are plotted as existing conditions, and should be considered approximate. An outboundary survey will be required if exact property line locations must be established.
  - 11) All elevations are based on USSS Datum. The site benchmark is shown on the plans. Proposed elevations and contours shown are to finish grade. Final pavement, sidewalk, building and other site improvement elevations shall be within 0.10 feet of that shown. Final elevations in areas to receive vegetative cover shall be within 0.20 feet of that shown. Final grading shall ensure drainage away from buildings and positive drainage in all directions with no ponding areas except where indicated on the plans. Construction means and methods to implement the grading plan shall be the sole responsibility of the contractor.
  - 12) All trenching and excavations shall be sloped or braced in strict compliance with all Federal, State and Local laws, rules and regulations. Compliance with these laws, rules and regulations is the sole responsibility of the Contractor. Permanent slopes shall not be steeper than 3 horizontal to 1 vertical unless specifically shown otherwise on these plans.
  - 13) All construction methods and operations shall be completed in such a manner as to protect all adjacent existing buildings and site improvements. Any damage to adjacent existing buildings and/or site improvements shall be repaired at the contractor's sole expense.
  - 14) All materials and methods of construction shall be in accordance with current Metropolitan St. Louis Sewer District Standard Construction Specifications and Standard Details, and MODOT Standard Specifications for Highway Construction unless specifically modified on these plans.
  - 15) At the completion of rough grading, all areas shall be fine graded to remove any soil clumps, or miscellaneous materials from the top twelve inches of soil. Once fine grading is completed, all areas of disturbed soil shall either be covered with a crushed rock surface of fertilized and seeded. Crushed rock shall be of sufficient size and gradation to withstand erosion by wind or water flow. Fertilizer shall be a commercial fertilizer of the following proportions: Nitrogen 12%, Phosphoric Acid 12%, Soluble Potash 12% and shall be applied in accordance with manufacturer's instructions at the rate of seven pounds per 1000 square feet. Fertilizer shall be applied prior to the application of seed, and shall be mixed thoroughly into the upper 2 inches of topsoil. Seed shall be a mixture of 50% Kentucky 31 Fescue and 50% Perennial Rye. Seed shall be applied evenly in two intersecting directions at a total rate of 8 pounds per 1000 square feet. Immediately following seeding a 1-1/2 inch mulch layer shall be applied to all areas receiving seed.
  - 16) Erosion protection fabric shall be placed over all seeded areas with slopes greater than 3H:1V and in all swales. Tack mulch may be used in lieu of filter fabric on all slopes. All seeded areas shall be watered immediately after placement of seed, mulch and erosion protection fabric to saturate the top 4 inches of soil.



Date: 4-1-04

THE ENGINEER WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PLAN. HE DOES NOT ASSUME RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, CONTRACTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED ENGINEER. THIS DOCUMENT IS TO BE USED ONLY FOR ANY PART OR PARTS OF THE PROJECT FOR WHICH THIS PAGE REFERS.

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O'FALLON QUARRY  
STORMWATER SYSTEM  
IMPROVEMENTS  
STORM IMPROVEMENTS  
Project No 2003011445

REVISIONS
City Review Comments

SITE BENCHMARK: Elev. 586.40 MoDOT #12-83 "Square" in center of concrete headwall, 26±' south of south outer road centerline, Sta. 639.30 I-70.

BEFORE YOU DIG - DRILL - BLAST  
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APPROVED  
4-15-04  
Fred Weber

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ST. LOUIS SEWER DISTRICT